

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

We claim:

Claims 1-29 (Cancelled)

30. (Currently amended) A method for the treatment of an eye lens, wherein a cut surface is produced inside the crystalline eye lens using multiple laser pulses, ~~wherein the pulse energy of each of the laser pulses is limited to a range from 1 pJ to 1 μ J and wherein two or more cut surfaces are produced simultaneously in a predetermined arrangement relative to one another.~~

31. (Canceled)

32. (Previously presented) The method according to Claim 30, wherein bubbles are produced in the eye lens by the laser pulse, the bubbles having a diameter of at most 50 μ m.

33. (Previously presented) The method according to Claim 30, wherein the thickness of the cut surface is limited to at most 5 μ m.

34. (Previously presented) The method according to Claim 30, wherein the cut area is produced by at least 10,000 laser pulses.

35. (Previously presented) The method according to Claim 30, wherein a cut area with a surface of 1 mm² to 10 mm² is produced.

36. (Previously presented) The method according to Claim 30, wherein two successive laser pulses are produced at a distance from one another in such a way that the faults produced by the laser pulses in the eye lens do not touch or overlap one another.

37. (Previously presented) The method according to Claim 30, wherein multiple cut surfaces are produced in a predetermined arrangement relative to one another.

38. (Currently amended) The method according to Claim 30, wherein the two one or more cut surfaces are produced having forms or partial surfaces of the following bodies: spherical, spherical segment, spherical sector, spherical layer, prismatoid or prism with elliptical, elliptic annular, circular, annular, parallelepipedal, parallelogram-shaped, rectangular, square, triangular or irregular base area and lateral area, where the base area and lateral area can be flat or curved in order to increase the ability of accommodation of an eye lens by at least two diopters.

39. (Cancelled)

40. (Currently amended) The method according to claim 30, wherein a cut surface with low roughness and good smoothness is produced inside the eye lens and the elasticity of the crystalline eye lens is enhanced by the cut surface having forms or partial surfaces of the following bodies: spherical, spherical segment, spherical sector, spherical layer, prismatoid or prism with elliptical, elliptic annular, circular, annular, parallelepipedal, parallelogram-shaped, rectangular, square, triangular or irregular base area and lateral area, where the base area and lateral area can be flat or curved.

41. (New) A method for the treatment of an eye lens, wherein a cut surface is produced inside the crystalline eye lens using multiple laser pulses, wherein the pulse energy of each of the laser pulses is limited to a range from 1pJ to 1 μ J, wherein a cut area with a surface of 1 mm² to 10 mm² is produced.

42. (New) The method according to claim 30, wherein the pulse energy of each of the laser pulses is limited to a range from 1 pJ to 1 μ J.

43. (New) A controller for a surgical laser, adapted to control a laser that can be connected to the controller in order to produce a cut surface inside a crystalline eye lens using multiple laser pulses, wherein said controller is designed for the laser to produce two or more cut surfaces simultaneously in a predetermined arrangement relative to one another.

44. (New) A controller according to Claim 43, wherein the controller is designed so that a bubble produced in the eye lens by a laser pulse is limited to a diameter of at most 50 μ m.

45. (New) A controller according to Claim 43, wherein the controller is designed so that the thickness of the cut surface is limited to at most 5 μ m.

46. (New) A controller according to Claim 43, wherein the controller is designed in such a way that the cut area is produced by at least 10,000 laser pulses.

47. (New) A controller according to Claim 43, wherein the controller is designed so that a cut area of 1 mm² to 10 mm² is produced.

48. (New) A controller according to Claim 43, wherein the controller is designed so that two successive laser pulses are located at a distance from one another, such that the faults produced by the laser pulses in the eye lens do not touch or overlap one another.

49. (New) A controller according to Claim 43, wherein the controller is designed to control the laser in order to produce multiple cut surfaces in a predetermined arrangement relative to one another.

50. (New) A controller according to Claim 43, wherein the controller is designed to control the laser so that one or more cut surfaces are produced, to thereby increase the ability of an eye lens to accommodate by at least two diopters.

51. (New) A surgical laser connected to a controller according to claim 43.

52. (New) The method according to claim 43, wherein the pulse energy of each of the laser pulses is limited to a range from 1pJ to 1 μ J.